PORTABLE DISPLAY CASE

FIELD OF THE INVENTION

This invention relates generally to display cases and, more particularly, to a multisectional, portable display case which can be converted conveniently from an information transporting configuration to an information displaying configuration.

BACKGROUND OF THE INVENTION

There are many and various methods and devices for displaying and presenting visual information. Portable easel-type frames may be used to support information bearing placards or panels or such panels or placards may include integral, foldably attached supporting panels or frames. In the former example, the frames must be carried and erected independently from the material to be displayed and the latter may be cumbersome and flimsey when erected. In addition, in both examples the material to be displayed must be afforded protection while being transported, generally requiring a portable container of some sort.

Portable containers or cabinets, including portable or collapsible cabinets, are known. U.S. Pat. No. 3,580,650 (to Morris) discloses a portable cabinet structure of molded plastic for housing electronic equipment. The cabinet includes box-shaped casing members connected by integral hinging strips so that the casing members are foldable about the hinging strips into operational configuration. The cabinet structure is molded from a thermoplastic material having sufficient flexibility for the hinging section and rigidity for the box-shaped section. The hinging strips are of reduced cross-sectional area compared to the walls of the sections, but do not have a feature that enables them to fold or collapse onto themselves and thereby occupy a minimal space between the casing sections.

DISCLOSURE OF THE INVENTION

It is a general object of the present invention to provide a multisectional portable display case for both transporting and displaying material.

Another object of the present invention is to provide an improved portable display case that may be conveniently converted from a slim, compact transporting mode to a point-of-use, free-standing display mode.

A specific object of the present invention is to provide a multisectional display case having a plurality of sections that are connected by flexible hinges so that the sections may be folded at the hinges to form a carrying case and unfolded at the hinges to form a display case.

These and other objects of the present invention are achieved by providing an improved portable display case having a number of sections connected at their lateral edges by flexible hinges so that the sections may be folded at the hinges into close parallel proximity to one another to form a compact carrying case and unfolded into a generally planar, free-standing display configuration in which the hinges permit the sections to become opened even beyond 180°, to provide a versatile display.

Other objects and advantages of the present invention will be understood with reference to the following specification and appended drawings and claims.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. **1** is a perspective view of the display case of the present invention unfolded in a flat display mode;

FIG. **2** is a perspective front view of the display case of FIG. **1** in its free-standing, erect display mode;

FIG. **3** is a perspective view of the display case of the present invention folded into its carrying mode;

FIGS. **4** and **5** are end views of the display case shown in FIGS. **1** to **3**, including phantom lines illustrating the folding of the display case from its configuration in FIG. **2** to its configuration depicted in FIG. **3**;

FIG. **6** is an expanded view of a hinge section; and

FIG. **7** is a further expanded view of a hinge section.

DESCRIPTION OF THE PREFERRED EMBODIMENT

With reference to the figures, it will be noted that the portable display case of the present invention, designated generally as **10**, includes three sections: section **12**, central section **14** and section **16**. The sections are generally rectangular with lateral sidewalls and have a shallow box- or tray-like shape. The sections may be molded from any sufficiently rigid thermoplastic material.

Sections **12** and **14** and sections **14** and **16** are joined at their adjacent lateral sidewalls or edges by hinges **18** and **20** respectively. The hinges are flexible, or "living," hinges and may be attached to the section sidewalls by any suitable conventional means such as by riveting, by adhesive means or by both. Three lines of weakness **22** are provided on each hinge, which are of identical construction. The lines of weakness are spaced from one another, are parallel and extended for the length of the hinges. Any suitable material may be used to form the hinges as long as it is flexible yet strong enough to withstand repeated flexures. The lines of weakness may be formed during the thermoforming process of making the hinges (if a thermoplastic material is used), by scoring or by spaced-apart perforations. As will be seen from the discussion of the operation of the display case, the lines of weakness enable the hinges to expand or collapse so that the display case may assume its carrying mode position or its display mode or open position, and so that the same hinge construction may be used along either the section **12/14** interface or the section **14/16** interface.

With further reference to the figures, a handle **24** is provided for use when the display case is in its carrying mode. The handle is positioned on the inner edge of section **12**, so that when the case is in its display mode, as shown in FIG. **2**, it cannot be seen. Securing straps **26** are provided for securing the display case in its carrying mode, but it is not beyond the scope of the present invention that a snap closure device be provided between the sections. Support feet **28** may be attached to the lateral end walls of the sections to provide non-slip support while the display case is in its upright display mode.

In FIG. **2**, a broken section shows a portion of the interior **30** of a section **16**. Display panel supports **36** molded integrally with the section extend around the interior periphery of the section. Velcro-type material **34** may be used to secure interchangeable and various display panels **32** in place, but the panels may also be held in place by any means such as snap or adhesive means. The panels may be of any desired configuration having (as shown) apertures **38** for receiving informa-